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Building & Highway Material Testing Laboratory

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Job No.: CTCE/BBMP/KRIDL/W.No.13/BC/Stripping/2017-18 13.01.2018

TEST REPORT ON STRIPPING VALUEOF ROAD AGGREGATES (STATIC IMMERSION TEST)

*** Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
*** Agency**	:	**Technical Manager (West),** KRIDL, Bangalore.
*** Name of Work**	:	Improvements to Roads and asphalting at pipeline road right side and other roads in Mllasandra Ward No.13 in Shettyhalli Sub Division, BBMP, Bangalore.
*** Reference**	:	BBMP/EE/DD/WO/146/2017-18 Dated: 21.12.2017
Technical Reference	:	IS: 6241
*** Type of Mix**	:	Bituminous Concrete
Date of Testing	:	13.01.2018

Type of binder : 60/70
Percentage of binder used : 5.00% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.00 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	3.1	3.20	96.80
2	3.2		
3	3.3		

*Information is furnished by the Customer/Representative.

Comments:

→ Minimum allowable Aggregate retained coating for Bituminous Concrete is 95%

Note:

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Basaveshwaranagar, Bangalore-560 079

AE-VS

ಸಹಾಯಕ ಕಾರ್ಯಪಾಲಕ ಅಭಿಯಂತರರು
ಶೆಟ್ಟಿಹಳ್ಳಿ ಉಪವಿಭಾಗ, ದಾಸರಹಳ್ಳಿ ವಲಯ
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Job No.: CTCE/BBMP/KRIDL/W.No.13/BC/Sp_Wa/2017-18 13.01.2018

TEST REEPORT ON SPECIFIC GRAVITY AND WATER ABSORPTION

* **Customer**	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* **Agency**	:	**Technical Manager (West),** KRIDL, Bangalore.
* **Name of Work**	:	Improvements to Roads and asphalting at pipeline road right side and other roads in Mllasandra Ward No.13 in Shettyhalli Sub Division, BBMP, Bangalore.
* **Reference**	:	BBMP/EE/DD/WO/146/2017-18 Dated: 21.12.2017
* **Sample ID**	:	Hot mix plant, Bangalore
Technical Reference	:	IS : 2386(Part -3)-1963 (RA-2011)
* **Type of Mix**	:	Bituminous Concrete
Date of Testing	:	13.01.2018

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2008	2009	2010	
2	Weight of basket suspended in water	W_2 g	755	755	755	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1239	1238	1255	
4	Weight of saturated surface dry aggregate in air	W_3 g	2006	2007	2008	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	767	769	753	
6	Weight of oven dried aggregate	W_4 g	1997	1996	1999	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.604	2.596	2.655	2.618
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.635	2.633	2.687	2.652
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.45%	0.55%	0.45%	0.48%

*Information is furnished by the Customer/Representative.

Comments:

→ Maximum allowable Aggregate Water absorption value for Bituminous Concrete is 2.0%

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Job No: CTCE/BBMP/KRIDL/W.No.13/BC/Bitumen/2017-18 13.01.2018

TEST REPORT ON BITUMEN CONTENT OF BITUMINOUS CONCRETE MIX

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of Work	:	Improvements to Roads and asphalting at pipeline road right side and other roads in Mllasandra Ward No.13 in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/146/2017-18 Dated: 21.12.2017
* Sample ID	:	Road at pipeline road right side Mallasandra Ward No.13
Technical Reference	:	IRC:SP:11-1984
Date of Testing	:	13.01.2018

BITUMEN CONTENT DETERMINATION

Description	Trail 1	Trail 2
1. Weight of Mixture before Test, g	500	500
2. Weight of Mixture after Test, g	472.5	472
3. Weight of Asphalt and Mineral matter Extracted, g	-	-
4. Weight of Mineral Matter, g.	-	-
5. Weight of Ash, g		
6. Weight of Bitumen Extracted, g. (corrected)	27.5	28.00
7. Bitumen content in %	5.50	5.60
8. Average	**5.55**	

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Job No: CTCE/BBMP/KRIDL/W.No.13/BC/Bitumen/2017-18 13.01.2018

TEST REPORT ON BITUMEN CONTENT AFTER GRADATION DETERMINATION OF BITUMINOUS CONCRETE MIX

* Customer	:	**Asst. Executive Engineer,** Shettyhalli Sub Division, BBMP, Bangalore.
* Agency	:	**Technical Manager (West),** KRIDL, Bangalore.
* Name of Work	:	Improvements to Roads and asphalting at pipeline road right side and other roads in Mllasandra Ward No.13 in Shettyhalli Sub Division, BBMP, Bangalore.
* Reference	:	BBMP/EE/DD/WO/145/2017-18 Dated: 21.12.2017
* Sample ID	:	Road at pipeline road right side Mallasandra Ward No.13
Technical Reference	:	IS 2386 and IRC:SP:11-1984
Date of Testing	:	13.01.2018

GRADATION AFTER EXTRACTION

Sieve Size in mm	Trail 1				Specified Limits as per MORTH specification table 500-18 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
19	0	0	0	100	100
13.2	36.68	7.76	7.76	92.24	79-100
9.5	35.48	7.51	15.27	84.73	70-88
4.75	74.56	15.78	31.05	68.95	53-71
2.36	63.25	13.39	44.44	55.56	42-58
1.18	55.45	11.74	56.17	43.83	34-48
0.6	53.15	11.25	67.42	32.58	26-38
0.3	46.32	9.80	77.23	22.77	18-28
0.15	36.32	7.69	84.91	15.09	12-20
0.075	45.65	9.66	94.57	5.43	4-10

Sieve Size in mm	Trail 2				Specified Limits as per MORTH specification table 500-18 (Grading-2)
	Weight Retained, gm	% Retained	%Cummulative Retained	% Passing	
19	0	0	0	100	100
13.2	36.65	7.76	7.76	92.24	79-100
9.5	45.21	9.58	17.34	82.66	70-88
4.75	64.23	13.61	30.95	69.05	53-71
2.36	76.32	16.17	47.12	52.88	42-58
1.18	66.25	14.04	61.16	38.84	34-48
0.6	56.65	12.00	73.16	26.84	26-38
0.3	32.25	6.83	79.99	20.01	18-28
0.15	26.3	5.57	85.56	14.44	12-20
0.075	38.59	8.18	93.74	6.26	4-10

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